



**Answer All the Following Questions**

**The First Question (10 Marks)**

State whether each of the following is true or false.

- 1- There is no such thing as manual information systems. Information systems must be computer-based.
- 2- Intranets are intra-organizational Web-based secure networks that facilitate information access and collaboration.
- 3- A set of programs that enable the hardware to process data” best describes software.
- 4- The collection of computing systems used by an organization is termed information technology.
- 5- The most traditional model of client server computing uses the mini computer to act as a database server providing data for analysis done by the PC clients using spreadsheets, database management systems, and application software.
- 6- A(n) DBMS is a group of programs that manipulate the database and provide an interface between the database and its users and other application programs.
- 7- A(n) schema is a description of the entire database.
- 8- A(n) record is a collection of related data fields.
- 9- A(n) character is the basic building block of information, consisting of uppercase letters, lowercase letters, numeric digits, or special symbols.
- 10- In 1986, the American National Standards Institute (ANSI) adopted SQL as the standard query language for relational databases.

**The Second Question (10 Marks)**

Select the best option to answer to each of the questions below

1. A \_\_\_\_\_ is a computer such as a PC attached to a network, which is used to access shared network resources. A \_\_\_\_\_ is a machine that is attached to this same network and provides services.  
A. client, client  
B. client, server  
C. server, client  
D. server, server
2. \_\_\_\_\_ connect several intranets via the Internet, by adding to the Internet a security mechanism and possibly some functionalities.  
A. Extranets  
B. Intranets  
C. Internets  
D. ISP
3. A computer program designed to support a specific task or business process (such as execute the payroll)  
A. Application Program  
B. Data Items  
C. Information  
D. Database
4. Consists of stored data items organized for retrieval  
A. Data Base  
B. Information  
C. Data Item  
D. knowledge
5. The \_\_\_\_\_ is a database model that describes data in which all data elements are placed in two-dimensional tables.  
A. table model  
B. relational model

- C. flat model
- D. object-oriented model
- 6. \_\_\_\_ directly interact with people or users.
  - A. Databases
  - B. Middleware
  - C. Back-end applications
  - D. Front-end applications
- 13. Developing a seamless integration of traditional databases with the Internet is often called a(n) \_\_\_\_\_.
  - A. semantic database
  - B. integrated Web
  - C. semantic Web
  - D. integrated database
- 7. \_\_\_\_ is the process of gathering enough of the right information in a timely manner and usable form and analyzing it to have a positive impact on business strategy, tactics, or operations.
  - A. Trend analysis
  - B. Knowledge management
  - C. Business intelligence
  - D. Market analysis
- 8. \_\_\_\_\_ refers to the conduct of e-commerce via wireless devices.
  - A. E-commerce
  - B. L-commerce
  - C. M-commerce
  - D. I-commerce
- 9. A company that performs most of its business functions electronically in order to enhance its operations and competitiveness is
  - A. E-Business
  - B. Electronic Commerce
  - C. Information technology
  - D. Intranet
- 10. Connects computers and other electronic devices via telecommunication networks
  - A. Intranet
  - B. Internet
  - C. Networked Computing
  - D. Extranets

**The Third Question (10 Marks)**

- a) Define transaction, transaction processing system, enterprise resource planning.
- b) Compare between
  - 1- manual information systems and computerized information systems.
  - 2- electronic commerce and electronic business
  - 3- multicore microprocessor and parallel processing
- c) Draw block diagram showing the components of information system.

**The Fourth Question (10 Marks)**

- a) Define grid computing, cloud computing, sequential access, direct access.
- b) Draw block diagram showing
  - 1- the main elements of telecommunication system.
  - 2- hardware components of computer.
- c) Compare between data warehouse, data mart, and data mining.

*With my best wishes*